IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TYLER DIVISION

REEDHYCALOG UK, LTD. and	§	
GRANT PRIDECO, INC.	§	
	§	
Plaintiffs	§	
	§	CASE NO. 6:06 CV 222
VS.	§	PATENT CASE
	§	
BAKER HUGHES OILFIELD	§	
OPERATIONS INC., HALLIBURTON	§	
ENERGY SERVICES INC., and U.S.	§	
SYNTHETIC CORPORATION	§	
	§	
Defendants	§	

MEMORANDUM OPINION AND ORDER

The Court has been advised that Baker Hughes Oilfield Operations Inc. ("Baker Hughes") and ReedHycalog UK, Ltd. and Grant Prideco, Inc. (collectively "ReedHycalog") have settled their outstanding claims brought against one another in this case. Thus, the pending motions, as they apply to only Baker Hughes and ReedHycalog are **DENIED** as moot. Further, the Court **DENIES** as moot Halliburton Energy Services, Inc.'s ("Halliburton") Motion to Sever Claims Made By and Against Baker Hughes (Docket No. 403). Thus, this order will only affect those motions between Halliburton and U.S. Synthetic Corporations's ("USS") (collectively, "Defendants") and ReedHycalog.

Before the Court are Defendants' Motion for Summary Judgment of Invalidity of ReedHycalog's Patents Based on Anticipation (Docket No. 309), Defendants' Motion for Partial Summary Judgment of Noninfringement with Respect to Cutters for Which Plaintiffs Have Failed to Produce Evidence of Infringement (Docket No. 324), Defendants' Daubert Motion to Exclude

the Expert Report of Mark E. Nusbaum (Docket No. 325), Defendants' Daubert Motion to Exclude the Expert Opinion Testimony of Thomas L. Read (Docket No. 326), Defendants' Daubert Motion to Exclude Expert Testimony of David Hall Regarding Infringement (Docket No. 327), ReedHycalog's Motion to Exclude Certain Testimony From Halliburton and USS's Damages Expert, Brian Napper, Under Federal Rule of Evidence 702 (Docket No. 328), and ReedHycalog's Daubert Motion to Exclude Certain Testimony of Baker Hughes's Technical Expert, Dr. George Cooper (Docket No. 334).

Having considered the parties' written submissions and oral arguments, the Court **DENIES**Defendants Motion for Summary Judgment of Invalidity of ReedHycalog's Patents Based on Anticipation (Docket No. 309), **DENIES** Defendants' Motion for Partial Summary Judgment of Noninfringement with Respect to Cutters for Which Plaintiffs Have Failed to Produce Evidence of Infringement (Docket No. 324), **DENIES** Defendants' Daubert Motion to Exclude the Expert Report of Mark E. Nusbaum (Docket No. 325), **DENIES** Defendants' Daubert Motion to Exclude the Expert Opinion Testimony of Thomas L. Read (Docket No. 326), **DENIES** Defendants' Daubert Motion to Exclude Expert Testimony of David Hall Regarding Infringement (Docket No. 327), **DENIES** ReedHycalog's Motion to Exclude Certain Testimony From Halliburton's and USS's Damages Expert, Brian Napper, Under Federal Rule of Evidence 702 (Docket No. 328), and **DENIES** ReedHycalog's Daubert Motion to Exclude Certain Testimony of Baker Hughes's Technical Expert, Dr. George Cooper (Docket No. 334).

BACKGROUND

ReedHycalog sued Defendants on May 12, 2006 and alleges Baker Hughes infringes U.S. Patent Nos. 6,861,098 (the "'098 Patent"), 6,861,137 (the "'137 Patent"), 6,878,447 (the "'447 Patent") (collectively, the "Thermal Characteristic Patents"), 6,601,662 (the "'662 Patent" or the "Impact Strength Patent"). On July 7, 2006, Baker Hughes filed its counterclaims and alleges

ReedHycalog infringes U.S. Patent Nos. 6,298,930 (the "'930 Patent"), 6,443,249 (the "'249 Patent"), 6,460,631 (the "'631 Patent"), and 7,000,715 (the "'715 Patent") (collectively the "Baker Hughes Patents"). As trial approaches, the parties filed a number of summary judgment and *Daubert* motions.

DEFENDANTS' MOTION FOR SUMMARY JUDGMENT OF INVALIDITY BASED UPON ANTICIPATION

Defendants claim Japanese Patent Application #S59-219500 ("Sumitomo") anticipates all asserted claims from the Thermal Characteristic Patents and the Impact Strength Patent. The Japanese Patent Office published Sumitomo on December 10, 1984. The earliest filing date of the Thermal Characteristic Patents and Impact Strength Patent is September 20, 2000. The Examiner considered Sumitomo during prosecution of the Thermal Characteristic Patents and did not consider Sumitomo during prosecution of the Impact Strength Patent.

Applicable Law

Summary judgment shall be rendered when the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law. FED. R. CIV. P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 323–25 (1986); *Ragas v. Tenn. Gas Pipeline Co.*, 136 F.3d 455, 458 (5th Cir. 1998). An issue of material fact is genuine if the evidence could lead a reasonable jury to find for the non-moving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). In determining whether a genuine issue for trial exists, the court views all inferences drawn from the factual record in the light most favorable to the nonmoving party. *Id.*; *Matsushita Elec. Indus. Co. v. Zenith Radio*, 475 U.S. 574, 587 (1986).

If the moving party has made an initial showing that there is no evidence to support the nonmoving party's case, the party opposing the motion must assert competent summary judgment

evidence of the existence of a genuine fact issue. *Matsushita*, 475 U.S. at 586. Mere conclusory allegations, unsubstantiated assertions, improbable inferences, and unsupported speculation are not competent summary judgment evidence. *See Eason v. Thaler*, 73 F.3d 1322, 1325 (5th Cir. 1996); *Forsyth v. Barr*, 19 F.3d 1527, 1533 (5th Cir. 1994). The party opposing summary judgment is required to identify evidence in the record and articulate the manner in which that evidence supports his claim. *Ragas*, 136 F.3d at 458. "Only disputes over facts that might affect the outcome of the suit under the governing laws will properly preclude the entry of summary judgment." *Anderson*, 477 U.S. at 248. Summary judgment must be granted if the nonmoving party fails to make a showing sufficient to establish the existence of an element essential to its case and on which it will bear the burden of proof at trial. *Celotex*, 477 U.S. at 322–23.

Courts presume claims within issued patents are valid and will only invalidate a patent claim if the party that seeks to invalidate the claim shows by clear and convincing evidence that the claim is invalid. 35 U.S.C. § 282; *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 962 (Fed. Cir. 2001) ("[A] moving party seeking to invalidate a patent at summary judgment must submit such clear and convincing evidence of invalidity so that no reasonable jury could find otherwise."). When the movant attacks a claim's validity and only relies on prior art the Examiner considered during prosecution, the movant bears the added burden to overcome the presumption that the Patent and Trademark Office ("PTO") properly examined the claim. *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1366 (Fed. Cir. 2007); *Polaroid Corp. v. Eastman Kodak Co.*, 789 F.2d 1556, 1560 (Fed. Cir. 1986); *see also Ethyl Molded Prods. Co. v. Betts Packaging, Inc.*, Civ. A. No. 85-111, 1988 WL 122168, at *40 (E.D. Ky. Sept. 2, 1988) (noting deference to PTO that its examiner properly examined a patent claim where the Examiner during prosecution considered the prior art alleged to invalidate the patent and stating "[t]he PTO includes one or more examiners who are presumed to have some expertise in interpreting the references and to be familiar from their

work with the level of skill in the art, and whose duty is to issue only valid patents.") (internal quotations and citations omitted); *Elantech Devices Corp. v. Synaptics, Inc.*, No. C 06-01839 CRB, 2008 WL 1734748, *7 (N.D. Cal. Apr. 14, 2008).

A patent claim is invalid if "the invention was patented or described in a printed publication in this or a foreign country . . . more than one year prior to the date of the application for patent in the United States." 35 U.S.C. § 102(b). Similar to the legal test for literal infringement, a printed publication anticipates a patent claim if the publication discloses every element of the claim, either explicitly or inherently. *Impax Labs., Inc. v. Aventis Pharm. Inc.*, 468 F.3d 1366, 1381 (Fed. Cir. 2006); *Peters v. Active Mfg. Co.*, 129 U.S. 530, 537 (1889) ("that which infringes later, anticipates if earlier"). To prove a printed publication inherently discloses a claim element, the movant must show "the prior art [disclosed in the publication] necessarily functions in accordance with, or includes, the claim [element]." *MEHL/Biophile Int'l Corp. v. Milgraum*, 192 F.3d 1362, 1365 (Fed. Cir. 1999). Ultimately, a skilled artisan's interpretation of the printed publication's disclosure determines whether the publication discloses each claim element, and a printed publication will anticipate a patent claim if one skilled in the art of the invention could combine the publication's disclosure with his own knowledge and possess the claimed invention as a result. *In re Elsner*, 381 F.3d 1125, 1128 (Fed. Cir. 2004) (quoting *In re LeGrice*, 301 F.2d 929, 936 (C.C.P.A. 1962)).

Analysis

The Sumitomo Reference

Sumitomo is directed towards a diamond sintering and processing method. Claim 2 of Sumitomo claims:

A method of processing sintered diamond objects with the following characteristics. A composite sintered diamond object is made by joining an ultra-hard alloy base material with a layer of a sintered diamond object that is made from a ferrous binder phase and diamond that is sintered under high pressure. Only the sintered diamond layer is immersed in acid or an electrolytic solution until the ferrous metals in the

surface layer of the sintered diamond object have been dissolved.

Defendants' Motion for Summary Judgment of Invalidity Based on Anticipation (Docket No. 309), Ex. 1, at 1 ("Sumitomo Translation").

Defendants claim the following portions of Sumitomo anticipate all asserted claims in the Thermal Characteristic and Impact Strength Patents. In the "Prior Art and Problems" section of the application, Sumitomo delineates the problems with unleached sintered diamonds and notes "[i]n the atmosphere, a diamond's surface turns to graphite at temperatures of 900 C or more. In a vacuum or inert gas, graphite does not form easily even around 1400 C. In [unleached sintered diamond], inferior tool performance is seen at around 750 C." *Id.* at Ex. 1, at 2. Sumitomo also states the following with regard to acid-based leaching processes:

As a means of improving the heat resistance of sintered diamond, sintered objects have been created that are not bound to ultra-hard allow base material, which are then immersed in aqua regia or similar substance and heat treated. This dissolves the metal binder phase in the sintered object (JSP S52 – 114589). This is said to allow the sintered diamond to withstand temperatures of up to 1200° C. However, the metal binder phase escapes, leaving cavities in the sintered material, which degrades the strength of the sintered material. The result is a material which lacks sufficient hardness as a tool. With this method, there are also considerable binding limitations, which makes a strong bond between the sintered diamond and the tool difficult.

Id.

Sumitomo states the effect of the invention is to "improve significantly the performance limit of insufficient heat resistance found in conventional composite sintered used in tools, without damaging its strength." *Id.* at Ex. 1, at 3. Sumitomo then describes the invention:

The purpose of this invention is to provide a new sintered diamond material that resolves the deficiencies of this sort of conventional sintered material. For instance, when using sintered diamond as a cutting tool, the part that becomes the hottest is the tip of the tool that comes into contact with the material being worked. The temperature slope acid of this section is considerable and as one moves away from the point of contact of the material being worked, the temperature drops quickly. Therefore, improving the heat resistance of just the surface potion of a disk-shaped sintered object like the one in Figure 2 would offer a significant improvement in the performance of such a tool. This invention is based on this point. It is a composite

sintered diamond layer, from which the binder phase has been removed from the surface layer. In this composite, sintered diamond layer is joined to the ultra-hard alloy base material during ultra-high pressure sintering of diamond and a ferrous metal binder phase as shown in Figure 2. The thermal resistance of tools made using this process is improved considerably. Additionally, there is binder phase inside the sintered diamond, so there is less loss of strength in the sintered object overall. . . . The majority of the ferrous metal binder phase is removed from an area that is at least .2 mm of the surface layer of the sintered diamond layer. . . . In order to remove the ferrous metal binder phase from the sintered diamond surface layers of these sintered composites, electrolytic removal may be employed by placing a spongy material containing an aqueous hydrochloric acid solution on the surface of the sintered object and applying a DC voltage. Using this sort of method, the binder phase can be removed from just the surface layer of the sintered diamond object without having the acid cause any damage to the ultra-hard alloy that serves as the base material.

Id. at Ex. 1, at 2–3.

Sumitomo subsequently describes two embodiments. The reference describes a process for electrolytic removal of the binder phase and states that after the process created the sintered object "the power was shut off and the sintered object was cut into many triangular pieces using electrical discharge machining [EDM]." *Id.* at Ex. 1, at 3. Subsequently, "[t]he cut surfaces were polished and examined, revealing that nearly all of the metal Co binder phase in an area 0.5 mm from the surface of the sintered diamond object had been removed electrolytically." *Id.* Sumitomo then describes the cutting tests performed on the sintered diamond object and states "[w]ith the sintered object of this invention, we were able to cut for 50 minutes until the relief wear land of the tool reached .4 mm, while the same relief wear land was attained after 10 minutes with the comparison sintered object." *Id.*

Anticipation of Thermal Characteristic and Impact Strength Patents

ReedHycalog submitted the declaration of its technical expert, David Hall. Defendants, in a *Daubert* motion, seek to exclude Hall's testimony regarding infringement. However, Defendants do not dispute that Hall is one skilled in the art and do not offer a declaration by one skilled in the art to contradict Hall's interpretation of Sumitomo.

Substantially Free of the Catalyzing Material

The asserted claims of the Thermal Characteristic Patents and the Impact Strength Patent contain the claim limitation where part of a volume, interstitial matrix, or set of interstitial regions is "substantially free of the catalyzing material." *E.g.*, '137 Patent, col. 16:57–67 (claiming a PCD element "wherein a first volume of the body remote from the working surface contains a catalyzing material and a second volume of the body adjacent to the working surface is substantially free of the catalyzing material to a depth from the working surface"); *id.* at col. 18:23–34 (claiming a PCD element "wherein the interstitial matrix in the body adjacent to a working surface is substantially free of the catalyzing material to a depth from the working surface"); '662 Patent, col. 19:41–55 (claiming a preform cutting element "wherein the interstitial regions adjacent to at least a first portion of the cutting surface are substantially free of the catalyzing material"). In the context of the Thermal Characteristic and Impact Strength Patents, "substantially free of the catalyzing material" means "free of most, but not all, of the catalyzing material." *ReedHycalog UK, Ltd. v. Baker Hughes Oilfield Operations Inc.*, No. 6:06 CV 222, 2007 WL 2688485, at *7 (E.D. Tex. Sept. 11, 2007) (Davis, J.).

The asserted claims of the Thermal Characteristic Patents require the volume or interstitial matrix to be free of most, but not all, of the catalyzing material to a depth from the working surface. '098 Patent, col. 14:26–39; '137 Patent, col. 16:57–67, col. 18:23–34; '447 Patent, col. 14:24–33. The asserted claims of the Impact Strength Patent require the volume, interstitial regions, or interstitial matrix adjacent to the cutting or working surface to be free of most, but not all, of the catalyzing material. '662 Patent, col. 18:23–31, col. 19:41–55, col. 20:1–14.

There are genuine issues of material fact as to whether Sumitomo discloses a PCD element with a volume, set of interstitial regions, or interstitial matrix substantially free of the catalyzing material. Hall declares that because one of the embodiments in Sumitomo discloses that EDM cut

the composite sintered diamond, the composite sintered diamond in Sumitomo was not substantially free of the catalyzing material, as EDM, under normal conditions, can only cut leached portions of PDC elements when those elements contain sufficient catalyzing material such that the leached elements contain a conductive path for current to flow and cut the PDC element. ReedHycalog's Opposition to Defendants' Motion for Summary Judgment of Invalidity Based on Anticipation, Ex.5 at 8 ("Hall Declaration").

While Defendants are correct that Sumitomo discloses removal of "nearly all" of the Cobalt binder phase, Hall's declaration raises a genuine issue of material fact as to whether one of ordinary skill in the art would understand Sumitomo to disclose such leached portion of a PCD element given that Sumitomo also discloses that EDM was able to cut the sintered diamond object after an electrolytic removal process had removed "nearly all" of the Cobalt binder phase. Further, Defendants may be correct that a high voltage EDM could cut through a PDC element portion that is substantially free of catalyzing material, but this fact alone is insufficient to eliminate a genuine issue of material fact as to how one of ordinary skill in the art would understand Sumitomo.

Hall also declared that in his experience the electrolytic removal processes, as described in Sumitomo, removes only a limited amount of Cobalt and does render the leached portion of the PCD element substantially free of the catalyzing material. Hall Declaration, at 9. While Sumitomo states "[o]nly the sintered diamond layer is immersed in acid or an electrolytic solution," there remains a genuine issue of material fact as to whether one of ordinary skill in the art would know which acid-based leaching method to use, as Sumitomo discloses immersion of the sintered objects in aqua regia to highlight prior art deficiencies. Sumitomo Translation, at 2. Thus, with the evidence in the record, summary judgment is improper.

Wherein Said Bonded Diamonds Exhibit a Thermal Characteristic Such that a 950 Degrees C Temperature and the Working Surface Results in a Temperature of Less than 750 Degrees C at the Depth

The asserted claims in the Thermal Characteristic Patents require the PCD cutting element to exhibit a thermal gradient of at least 200 degrees between the working surface and the depth, which is the gradient across portion of the cutting element that is free of most, but not all, the catalyzing material. '098 Patent, col. 14:27–38; '137 Patent, col. 16:57–65, col. 18:23–35; '447 Patent, col. 14:24–33. The parties agree this thermal gradient naturally results from removal of catalyzing material from the PCD element to a depth from the working surface.

There remain genuine issues of material fact with regard to whether Sumitomo discloses a PCD element that exhibits the claimed thermal characteristic. Sumitomo discloses temperatures at whichleached and unleached diamonds begin to fail. Sumitomo Translation, at 2. Sumitomo subsequently states that sintered diamond objects created by the disclosed process have increased thermal resistance. *Id.* at 3. Thus, with the evidence in the record, there remains a genuine issue of material fact as to whether one of ordinary skill in the art would understand this increased thermal resistance from the disclosed leaching process to result in the thermal characteristic claimed in the Thermal Characteristic Patents.

Wherein the First Volume and the Second Volume Have Substantially the Same Impact Strength

The asserted claims in the Impact Strength Patent require the first volume, portion of the cutting surface, or interstitial matrix of the PCD element or preform cutting element have substantially the same impact strength as the second volume, portion of the cutting surface, or interstitial matrix of the PCD element or preform cutting element. '662 Patent, col. 18:23–31, col. 19:41–55, col. 20:1–14. The Court construed "impact strength" to mean "resistance to impact." *ReedHycalog*, 2007 WL 2688485, at *9.

There remain genuine issues of material fact with regard to whether Sumitomo discloses a

PCD element or preform cutting element where the leached portion of the PCD element has substantially the same impact strength as the unleached portion. Sumitomo states sintered diamond objects leached in accordance with the disclosed method "have less loss of strength" and that the effect of the invention is to not damage the strength of the sintered diamond object as a result of the process. Sumitomo Translation, at 2–3. Sumitomo does not indicate whether the disclosed strength is the resistance to impact of the leached and unleached portions of the sintered diamond object or another strength metric.

Hall states the disclosure of "strength" in Sumitomo is the compressive strength of the sintered diamond object as opposed to the impact strength of the leach and unleached portions, as Sumitomo discloses compressive strength test results. Hall Declaration, at 9. According to Hall, unleached and leached portions of a PCD element with the same compressive strengths often have different impact strengths. *Id.* Thus, with the summary judgment evidence, there remains a genuine issue of material fact as to whether one of ordinary skill in the art would understand Sumitomo's use of the term "strength" to mean the leached and unleached portion of the PCD element have substantially the same impact strength.

As genuine issues of material fact remain with regard to whether Sumitomo anticipates the asserted claims of the Thermal Characteristic and Impact Strength Patents, the Court **DENIES** Defendants' Motion for Summary Judgment (Docket No. 309).

DEFENDANTS' MOTION FOR PARTIAL SUMMARY JUDGMENT OF NONINFRINGEMENT AND DAUBERT MOTION TO EXCLUDE TESTIMONY OF DAVID HALL REGARDING INFRINGEMENT

Defendants seek partial summary judgment of noninfringement for accused drill bits not mentioned in Hall's Expert Report, for drill bit cutters produced to ReedHycalog that Hall did not test, and for drill bit cutters where Hall's data allegedly shows the accused cutters do not infringe the Impact Strength Patent. Defendants also seek summary judgment on drill bits cutters

ReedHycalog does not accuse of infringement. Finally, Defendants seek to preclude Hall for testifying at trial regarding infringement and claim Hall's abrasion test, impact strength test, visual observation, and cutter cross-section analysis are not reliable tests to show the accused drill bit cutters contain the claimed thermal characteristic claimed in the Thermal Characteristic Patents or the that the leached and unleashed portions of the accused drill bit cutters have substantially the same impact strength, as claimed in the Impact Strength Patent.

Background

ReedHycalog initially requested 20 samples of each partially leached cutter Defendants identified in response to an interrogatory where ReedHycalog requested a list of drill bit cutters with allegedly infringing characteristics. USS responded that the cost to supply those samples exceeded \$1.7 million and would require USS to produce almost nine thousand sample drill bit cutters. Similarly, Baker Hughes responded that ReedHycalog's request would cost \$300,000 to \$400,000 and would involve production of at least two thousand sample drill bit cutters. The parties narrowed the number of produced cutters and ReedHycalog requested those cutters most frequently used in allegedly infringing drill bits and those cutters with the highest sales volumes.

ReedHycalog delivered the cutters to Hall, its infringement expert, for testing. Hall visually observed the cutters, abrasion tested a subset of the cutters on a traditional lathe and a vertical turret lathe ("VTL"), impact tested a subset of the cutters, and analyzed the cutters' cross-sections. Hall's tests are expensive, and Hall has invoiced ReedHycalog for over \$500,000, and ReedHycalog claims most of this amount relates to Hall's tests.

Applicable Law

Defendants motion for summary judgment is intertwined with their *Daubert* motion to exclude Hall's infringement testimony. In particular, Defendants' motions raise two related issues:

(1) whether Federal Rule of Evidence 702 excludes Hall's testimony with regard to infringement;

(2) whether, if Hall's infringement testimony is admissible evidence, Hall's testimony provides a genuine issue of material fact with regard to whether untested, unproduced, and certain tested accused drill bit cutters infringe the asserted claims of the Thermal Characteristic and Impact Strength Patents.

Federal Rule of Evidence 702 allows testimony of a witness qualified as an expert by knowledge, skill, experience, training, or education if scientific, technical, or other specialized knowledge testimony will assist the trier of fact to understand the evidence or determine a fact in issue. The expert witness may proffer fact and opinion testimony if: (1) the testimony is based upon sufficient facts or data; (2) the testimony is the product of reliable principles and methods; and (3) the witness has applied the principles and methods reliably to the facts of the case. *Id*.

Courts decide preliminary questions that concern a witness's qualifications and the admissibility of evidence. FED. R. EVID. 104(a). Courts assess a nonexclusive list of factors to determine whether scientific expert testimony is reliable. *Id.* (advisory committee notes, 2000 amendments); *Daubert v. Merrell Dow Pharm.*, 509 U.S. 579, 593–94 (1993). These factors include: (1) whether others can or have objectively tested the expert's technique or theory; (2) whether the technique or theory has been subject of peer review and publication; (3) the known or potential error rate of the technique or theory when applied; (4) the existence and maintenance of standards and controls; and (5) whether the scientific community has generally accepted the technique or theory. FED. R. EVID. 702 (advisory committee notes, 2000 amendments); *Daubert*, 509 U.S. 593–94.

If Hall's infringement testimony is admissible, Defendants must show Hall's opinion, in addition to the facts in the record, does not raise any genuine issues of material fact as to whether Defendants' infringe asserted claims of the Thermal Characteristic and Impact Strength Patents. FED. R. CIV. P. 56(c); *Celotex*, 477 U.S. at 323–25.

Analysis

Hall's testimony is admissible under Rule 702. Defendants do not dispute that Hall is a qualified expert. Hall's conclusions are based on industry tests, his analysis of the cross-section of the drill bit cutters, and his experience. Hall supplemented the data from his tests with his own observation of the drill bit cutters' cross-sections to render admissible expert testimony. That Defendants do not agree with Hall's conclusions or propose their own testing methodology do not exclude Hall's testimony under Rule 702.

Hall's testimony raises genuine issues of material fact as to whether untested cutters or accused cutters not mentioned in his report infringe the Thermal Characteristic and Impact Strength Patents. Hall's report opines that he did not need to test all produced cutters because of the similarity between cutters, and that in his opinion Defendants' partially leached cutters with commercially reasonable characteristics would infringe the Thermal Characteristic and Impact Strength Patents. Similarly, Hall's conclusions as to the impact strength of the tested cutters raise a genuine issue of material fact as to whether the leached and unleached portions of those cutters contain substantially the same impact strength, even under Defendants' construction of the term. Therefore, Defendants' Motion for Partial Summary Judgment of Noninfringement with Respect to Cutters for Which Plaintiffs Have Failed to Produce Evidence of Infringement (Docket No. 324) and Defendants' Daubert Motion to Exclude Expert Testimony of David Hall Regarding Infringement (Docket No. 327) are **DENIED**.

REMAINING DAUBERT MOTIONS

Defendants' Daubert Motion to Exclude the Expert Report of Mark E. Nusbaum

The parties will present inequitable conduct portion of the case to the Court. Thus, the Court **DENIES** Defendants' Daubert Motion to Exclude the Expert Report of Mark E. Nusbaum (Docket No. 325). Defendants may object to Nusbaum's testimony at trial.

Other Daubert Motions

The Court has considered the parties oral arguments and written submissions and **DENIES** all remaining *Daubert* motions.

CONCLUSION

For the abovementioned reasons, the Court **DENIES** Defendants Motion for Summary Judgment of Invalidity of ReedHycalog's Patents Based on Anticipation (Docket No. 309), **DENIES** Defendants' Motion for Partial Summary Judgment of Noninfringement with Respect to Cutters for Which Plaintiffs Have Failed to Produce Evidence of Infringement (Docket No. 324), **DENIES** Defendants' Daubert Motion to Exclude the Expert Report of Mark E. Nusbaum (Docket No. 325), **DENIES** Defendants' Daubert Motion to Exclude the Expert Opinion Testimony of Thomas L. Read (Docket No. 326), **DENIES** Defendants' Daubert Motion to Exclude Expert Testimony of David Hall Regarding Infringement (Docket No. 327), **DENIES** ReedHycalog's Motion to Exclude Certain Testimony From Halliburton's and USS's Damages Expert, Brian Napper, Under Federal Rule of Evidence 702 (Docket No. 328), **DENIES** ReedHycalog's Daubert Motion to Exclude Certain Testimony of Baker Hughes's Technical Expert, Dr. George Cooper (Docket No. 334), and **DENIES** as moot Halliburton's Motion to Sever Claims Made By and Against Baker Hughes (Docket No. 403).

So ORDERED and SIGNED this 20th day of May, 2008.

